SIEMENS

Data sheet 6XV1871-8AH15

product type designation

IE Connecting Cable M12-180/M12-180

IE connecting cable M12 push pull 180 / M12 push pull 180, only for ET200SP BusAdapter, preassembled with IE FC trailing cable GP, M12 plugs (D-coded, push-pull), length 1.5 m.



| suitability for use | for connecting Industrial Ethernet stations (SIMATIC ET200 or XF-200 with M12 bus adapter) with degree of protection IP20 |
|---|---|
| cable designation | 2YY (ST) CY 2x2x0,75/1,5-100 LI GN |
| wire length | 1.5 m |
| electrical data | |
| number of electrical connections | 2 |
| attenuation factor per length | |
| • at 10 MHz / maximum | 0.063 dB/m |
| • at 100 MHz / maximum | 0.213 dB/m |
| impedance | |
| • at 1 MHz 100 MHz | 100 Ω |
| relative symmetrical tolerance | |
| • of the characteristic impedance at 1 MHz 100 MHz | 5 % |
| near-end crosstalk per length | |
| • at 1 MHz 100 MHz | 0.5 dB/m |
| transfer impedance per length / at 10 MHz | 20 mΩ/m |
| loop resistance per length / maximum | 120 mΩ/m |
| operating voltage | |
| RMS value | 80 V |
| NVP value in percent | 66 % |
| mechanical data | |
| number of electrical cores | 4 |
| design of the shield | Overlapped aluminum-clad foil, sheathed in a braided screen of tin-plated copper wires |
| core diameter | |
| of AWG22 insulated conductor | 0.75 mm |
| outer diameter | |
| of inner conductor | 0.75 mm |
| of the wire insulation | 1.5 mm |
| of the inner sheath of the cable | 3.9 mm |
| of cable sheath | 6.5 mm |
| symmetrical tolerance of the outer diameter / of cable sheath | 0.2 mm |
| material | |
| of the wire insulation | polyethylene (PE) |
| of the inner sheath of the cable | PVC |
| of cable sheath | PVC |
| color | |
| of the insulation of data wires | white/yellow/blue/orange |
| | |
| of cable sheath | green |

| a with single hand / minimum normicaible | 32.5 mm |
|---|--|
| with single bend / minimum permissible with multiple bends / minimum permissible | 49 mm |
| with multiple bends / minimum permissible | |
| with continuous bending number of bending cycles | 100 mm 3000000; for use in cable carriers, for 3 million bending cycles with a bending |
| | radius of 200 mm, a speed of 4 m/s, and an acceleration of 4 m/s ² |
| tensile load / maximum | 150 N |
| weight per length | 68 kg/km |
| plug | |
| type of plug interlock | screwed |
| design of plug-in connection | M12-180 |
| connector coding | M12 push-pull |
| of the M12 circular connector | D-coded |
| ambient conditions | |
| ambient temperature | |
| during operation | -25 +75 °C |
| during storage | -25 +75 °C |
| during transport | -25 +75 °C |
| during installation | -10 +60 °C |
| • note | Electrical properties measured at 20 °C, tests according to DIN VDE 0472 |
| fire behavior | flame resistant according to UL 1685 (CSA FT 4) |
| chemical resistance | |
| • to mineral oil | conditional resistance |
| • to grease | Conditional resistance |
| radiological resistance / to UV radiation | resistant |
| protection class IP | IP20 |
| product features, product functions, product components / ge | neral |
| product feature | |
| halogen-free | No |
| • silicon-free | Yes |
| standards, specifications, approvals | |
| | Voc: o/ETI \us CMC ET4 / /ETI \us DI TC / Sun Bos / OII DES |
| UL/ETL listing / 300 V Rating UL/ETL style / 600 V Rating | Yes; c(ETL)us, CMG FT4 / (ETL)us PLTC / Sun Res / OIL RES Yes; cRUus AWM 21694 AWM I A/B 60°C 600V FT2 |
| , , | Tes, crous AVVIVI 21094 AVVIVI 1 A/B 00 C 0000 F 12 |
| certificate of suitability • EAC approval | Yes |
| • • | Yes |
| CE marking Pol-IS conformity | |
| RoHS conformity And and for attractive depoliting. | Yes |
| standard for structured cabling | Cat5e |
| Marine classification association | Ma |
| American Bureau of Shipping Europe Ltd. (ABS) For all marine placeification assists (DV) | No No |
| French marine classification society (BV) But the but the classification society (BV) But the but the but the classification society (BV) But the but the but the classification society (BV) But the | No |
| Det Norske Veritas (DNV) | No |
| Germanische Lloyd (GL) Lloyde Parietze of Obierien (LDC) | No No |
| Lloyds Register of Shipping (LRS) | No |
| Nippon Kaiji Kyokai (NK) | No |
| Polski Rejestr Statkow (PRS) | No |
| reference code | we |
| according to IEC 81346-2 | WG |
| • according to IEC 81346-2:2019 | WGB |
| further information / internet links | |
| internet link | |
| to web page: selection aid TIA Selection Tool | http://www.siemens.com/tia-selection-tool |
| to website: Industrial communication | http://www.siemens.com/simatic-net |
| • to website: Industry Mall | https://mall.industry.siemens.com |
| to website: Information and Download Center | http://www.siemens.com/industry/infocenter |
| • to website: Selection guide for cables and connectors | https://sie.ag/2QdlxcP |
| • to website: Image database | http://automation.siemens.com/bilddb |
| • to website: CAx-Download-Manager | http://www.siemens.com/cax |
| • to website: Industry Online Support | https://support.industry.siemens.com |
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